

# The Changing Face of Transit in Virginia

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# History of Transit in the United States

**1630-** Boston- reputed first publicly operated ferryboat

**1710-** New York- reputed first use of ox carts for carrying passengers

**1888-** Richmond- first successful electric street railway transit agency

**1964** – Urban Mass Transit Act

**1966-** Providence- first statewide transit agency (Rhode Island Public Transit Authority)

**1969-** Northern Virginia- Shirley Highway is first “transitway” for carpools and transit vehicles only

**1983-** Federal transit trust fund created

**1998-** Major expansion and restructuring of the federal transportation program (Transportation Equity Act for the 21<sup>st</sup> Century)



# History of Transit in Virginia- Operations and Service Growth



**Mid 1800s-** Rail becomes the preferred long-distance travel mode

**1888-** World's first commercially successful streetcar system- Richmond

**1949-** Buses replace electric trolleys in Richmond

**1969-** WMATA breaks ground on the Metrorail system

**1969-** First express bus highway lanes in the U.S. on I-395, later opened to carpools

**1973-** Oil embargo encourages use of transit and carpooling in the US

**1976-** Metrorail service begins with 4.2 miles in Washington, DC

**1977-** Metrorail service begins in Virginia

**1979-** Fuel shortage again increases the use of transit and carpooling

**1992-** Virginia Department of Rail and Public Transportation (DRPT) created as a new state agency

# History of Transit in Virginia- State Government

1927- Department of Highways established as a state agency

1974- Department's name changed to Dept. of Highways and Transportation, adding rail and transit to its jurisdiction

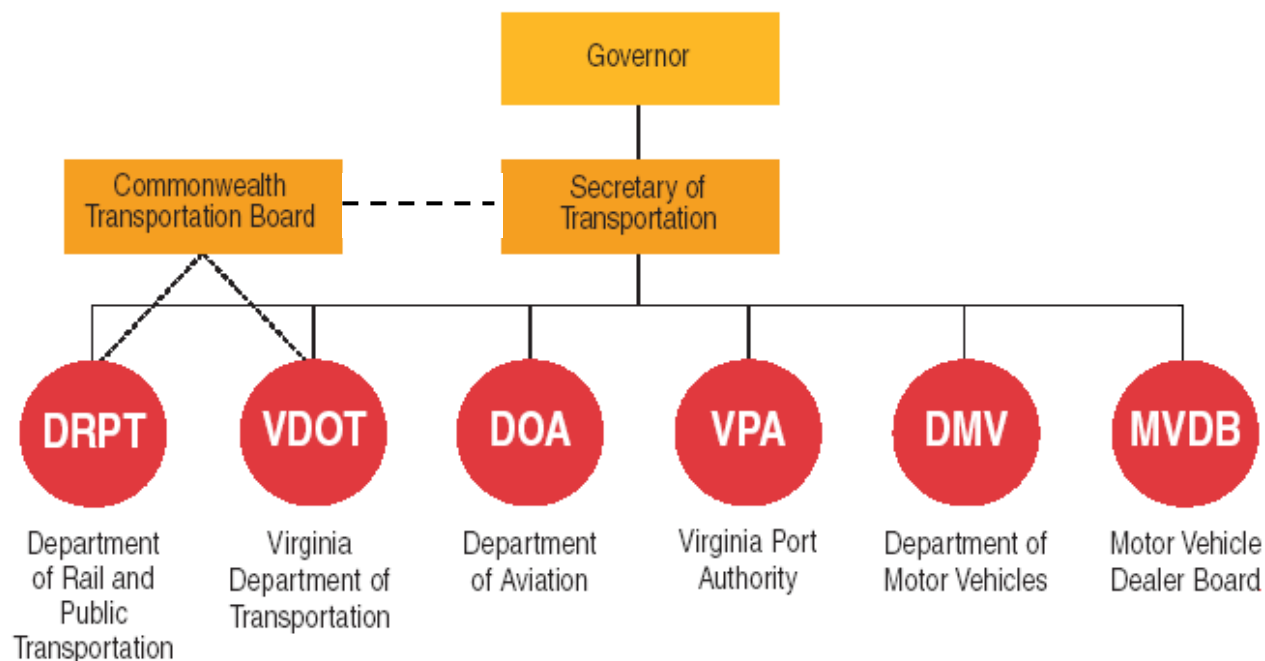
1979- Transit division created within the Dept. of Highways and Transportation

1986- Agency renamed Virginia Department of Transportation

1992- Virginia Department of Rail and Public Transportation (DRPT) created as a separate state agency



# Who is DRPT?



- ❑ Works with over 100 public and private partners to provide project management services, planning support, technical expertise, financial support and program advocacy

# Three Main Areas of Activity

- Funding Support
- Advocacy
- Planning and technical support

## ☐ Rail

- Freight rail
- Passenger rail

## ☐ Transit

- Public transit systems and services
- Special needs transportation

## ☐ Congestion Management

- Ridesharing: carpools, vanpools
- Incentive programs for employers
- Telework



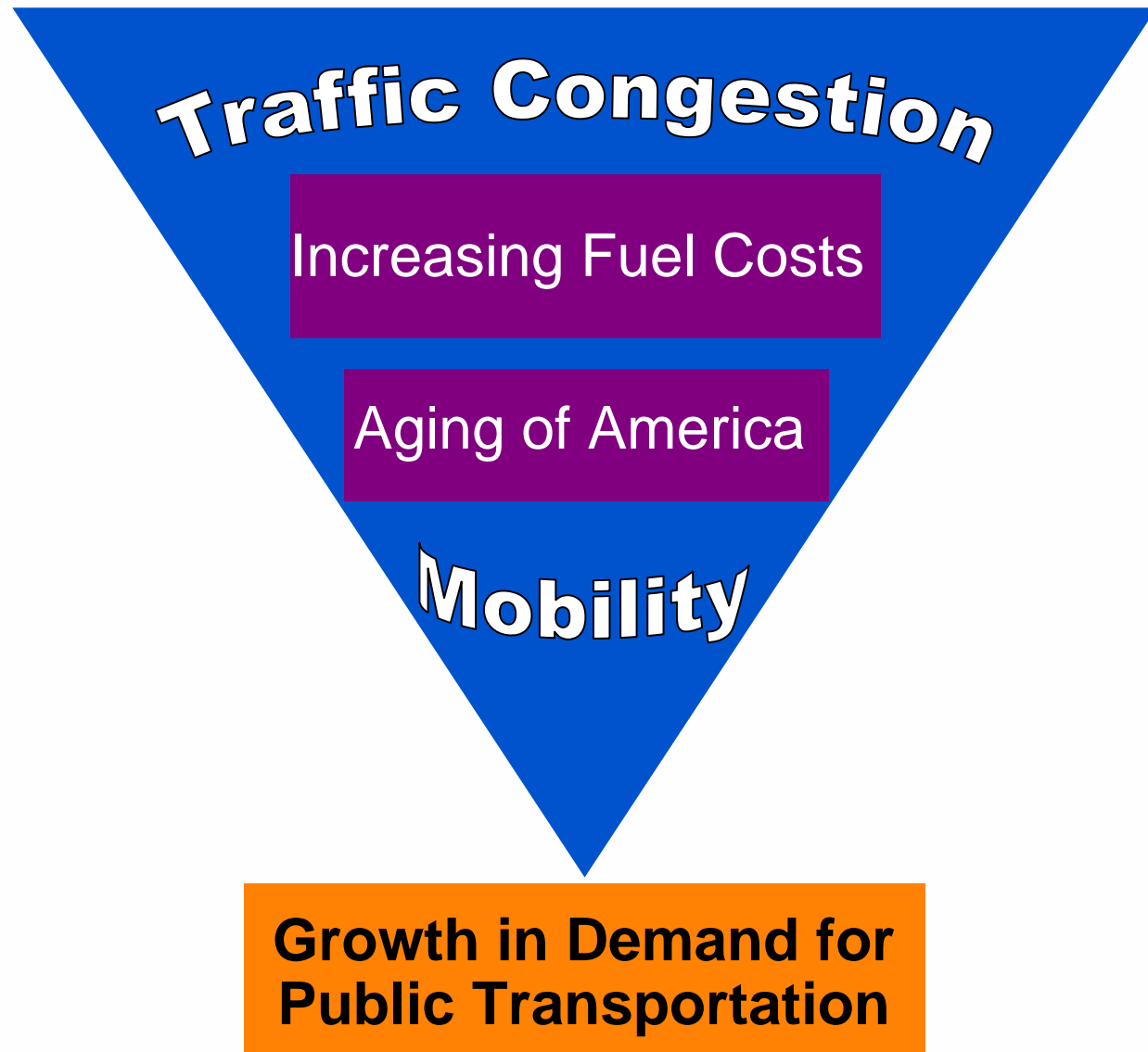
# Transit Trends in Virginia

- ❑ 24.14 passenger trips per person in urbanized areas in 2006
- ❑ 1,685,315 annual transit trips in rural areas in 2006
- ❑ Virginia Transit Performance Report (2000-2005)
  - Ridership - ridership grew 21%
  - System Efficiency - Cost per trip is lower than any of the neighboring states
  - System Effectiveness - More trips per vehicle revenue hour than NC or TN
  - Farebox Recovery - Higher operating cost recovery than NC or TN
  - Total Transit Miles Operated - 12% increase





# Transit Trends



# The Aging of America

- ❑ Seniors will be the fastest growing age group in the decades ahead
- ❑ Without access to public transportation:
  - Safety risks
  - Isolation
  - Reduced independence
  - Diminished quality of life and health
- ❑ More than one in five people over age 65 don't drive
- ❑ More than half of non-drivers over 65 stay home on any given day partially due to a lack of transportation:
  - 15% fewer trips to the doctor
  - 59% fewer shopping trips and restaurant visits
  - 65% fewer trips for social, family and religious activities

# Increasing Fuel Costs

- ❑ In October 2007, the U.S. experienced record high fuel costs at over \$90 a barrel
- ❑ In previous national fuel price spikes:
  - Hardest hit cities (2005): VA had two of the top 10
  - #5 DC/VA/MD area:
    - Average two-driver household had a \$2,255 annual increase in fuel expenses
  - #8 Richmond:
    - Average two-driver household had a \$2,045 annual increase in fuel expenses
- ❑ Gas prices mean salary reduction
  - Minimum wage workers in the US are paying up to 11.3% of their salaries for fuel costs

Sources: Sperling's BestPlaces, Salary.com

# Related Growth in Ridership

- ❑ Transit systems in VA have experienced growth during times of increased fuel prices:
  - WMATA: up more than 8%
  - GRTC: up 11%
  - HRT: up 8.7%
  - Greater Roanoke Transit: up 11%

# Transit- Historically and Today

## ❑ The Challenge for Transit Since WWII

- Pattern of sprawl
- Focus on the automobile
- Lack of investment

## ❑ The Benefits of Investing in Transit Today

- Mobility, independence and access
- Choices for people who cannot/do not drive
- Cost effective transportation during times of high fuel costs
- Flexible service that can adapt quickly to meet market demands
- Transit-Oriented Development and less sprawl
- More capacity in key, congested corridors
- Less strain on highways
- Environmental and social benefits

# Future Transit Strategy

- ❑ Building significantly more road capacity in the future will be challenging.
- ❑ We must have a balanced and well funded transportation program.
- ❑ We need to develop broader regional perspectives and provide attractive transit choices.
- ❑ Land use and development patterns need to better support transit, walking and biking trips.
- ❑ We must maximize the results we can achieve with limited transportation funding, and focus on more multimodal solutions.

# Commuter Rail

## Virginia Railway Express



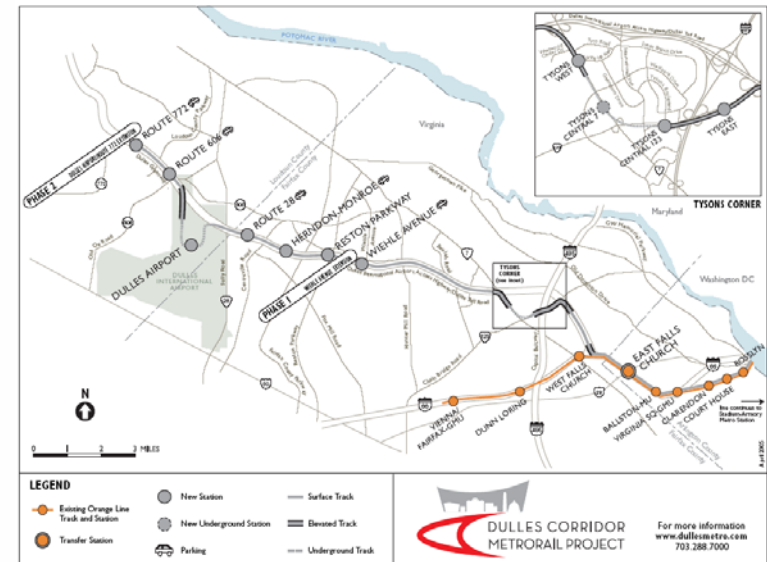
- ❑ Ridership continues to grow with improved reliability and efforts are underway to increase capacity



# Heavy Rail Transit

## □ Dulles Corridor Metrorail Project

- Phase 1 will extend Metrorail service through Tysons Corner to Reston and provide the equivalent capacity of four highway lanes during peak travel periods



# Light Rail Transit

## ❑ Norfolk Light Rail

- The Tide will have 11 stations over 7.4 miles and is expected to carry up to 12,000 passengers per day



# Bus Rapid Transit (BRT)

- ❑ BRT is a flexible, rubber-tired rapid-transit mode that combines stations, vehicles, services, running ways and Intelligent Transportation System (ITS) elements into an integrated system.



# Benefits of BRT

- ☐ Travel time savings
- ☐ Flexibility – Can operate on neighborhood streets and on designated roadways
- ☐ Transit ridership increases
- ☐ Less expensive than rail
- ☐ Can be developed incrementally
- ☐ Promotes positive changes in land use

# Transit and Land Use

- ❑ Transit agencies, operators and localities should establish stronger partnerships to promote better land use
- ❑ Example of Virginia success:
  - Arlington residential and business development near Ballston metro station
- ❑ Future opportunities and work in progress:
  - Walkable communities near the Dulles Corridor Metrorail Project stations
  - Mixed-use development along the Norfolk Light Rail route
  - Regional transit development plans in cities and counties across Virginia
  - Coordinated human service transportation plans

# Maximizing the Bus System



- ☐ Market-based route system
- ☐ Focus on density
- ☐ Clean, safe bus shelters, buses and facilities
- ☐ 10-15 minute headways
- ☐ Implementing new technology:
  - Smart fare systems
  - GIS
  - E-mail notifications for real-time bus arrivals and schedule information
  - Real-time schedule information at bus stops

# Faster, More Convenient Service



## ❑ Electronic payment systems:

- SmartTrip card expansion project (fall 2007)
- Seamless trips between transit services in the DC metro area and from Fredericksburg to Baltimore

## ❑ Traffic and transit schedule management:

- Transit Signal Priority (TSP)
- 25 intersections on Route 1 between Kings Highway and Fairfax Co. Parkway
- Fairfax exploring integration in Reston



## ❑ Congestion information and transit choices:

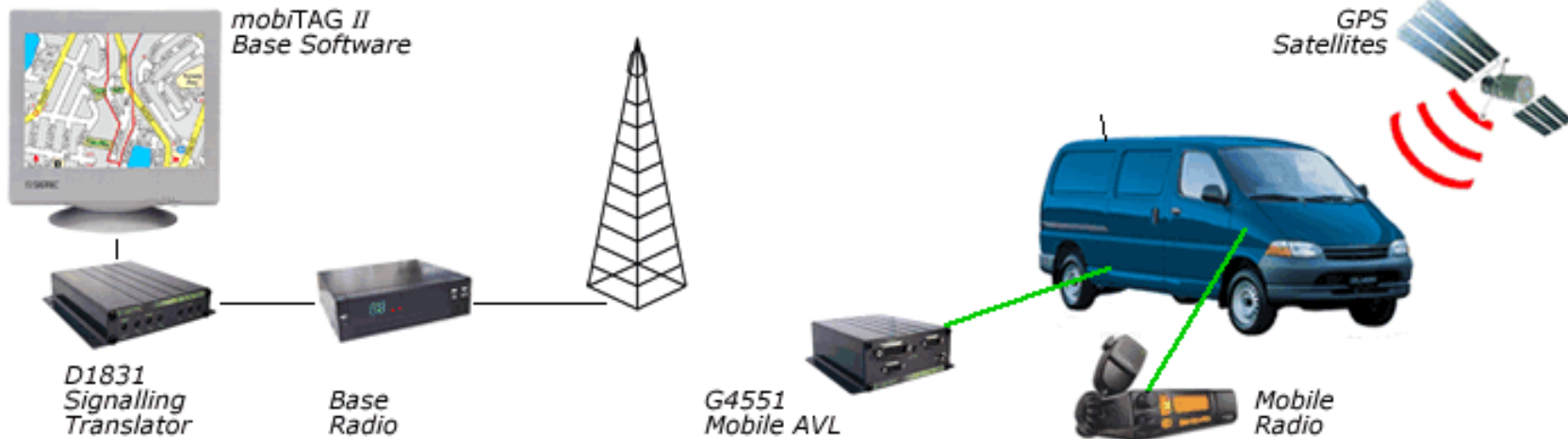
- Statewide 511 system: incorporating transit information



# ITS Technology



- ☐ Automatic vehicle location system using GPS
- ☐ Signal preemption to reduce travel time
- ☐ Real-time schedule information at stops/stations, website, PDA's, etc.
- ☐ Vehicle interior stop announcements
- ☐ Online reservations (depending on service)
- ☐ Mobile Data Terminals for in-vehicle mapping and on-time performance



# Real-Time Service Information

## ❑ On PDA's, cell phones or by e-mail:

- Existing today: Schedule Information for Northern Virginia Bus Systems, VRE and Metro

## ❑ At transit stops:

- Electronic schedule information and tracking signs
  - City of Fairfax (CUE) and ART (Arlington Transit)
- Bus signaling beacons
  - City of Fairfax – under development

## ❑ Onboard vehicles:

- Electronic stop information: voice and screen displays
- WIFI (wireless Internet) access
  - Blacksburg pilot program



# Commuter Services

## ☐ NuRide:

- Provides incentives for ridesharing – up to \$500/year
- Web-based
- Allows for employer ridematching (ride with someone you know)
- Complements traditional rideshare database

## ☐ Commuter Connections:

- Helps people find contacts to establish carpools in the metro DC area

## ☐ Statewide Rideshare Database: (under dev.)

- Allows people to find opportunities for shared trips across Virginia

# FlexCar/ZipCar



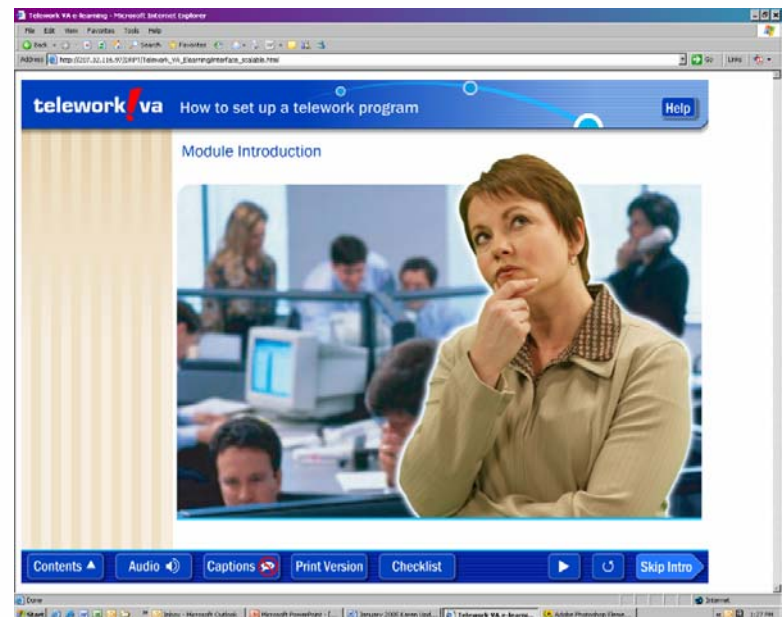
- ☐ Supports transit use
- ☐ Motivates behavior change
- ☐ Membership fee reimbursement incentive

# Telework Programs

## ❑ Telework!VA program

- Incentive-based DRPT program for Virginia businesses
- E-learning modules to train businesses in how to establish telework programs

## ❑ Office of Telework Promotion & Broadband Assistance



# Meeting the Need

## ❑ Human Service Programs

- 50 providers across the state provide transportation for low income, elderly or disabled citizens



- Federal New Freedom Program available this year



# Keys to Future Success



- ☐ Maintenance of effort
- ☐ Continue partnerships with localities and state agencies in regional transportation and land use planning
- ☐ Continue to pursue multimodal transportation solutions





Virginia Department of Rail and Public Transportation  
***The Smartest Distance Between Two Points***

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